REMARKS

In the Office Action dated October 19, 2005, claims 20-30 were examined with the result that all claims were rejected. The Office Action was a non-final action. In response, Applicant has rewritten claims 20, 21, 27, 28 and 30. In view of the above amendments and following remarks, reconsideration of this application is requested.

In the Office Action, claims 20-30 were rejected under 35 USC §112, second paragraph, as being indefinite. More specifically, the Examiner objected to claims 20, 21 and 30 because of the term "proteon" and the phrase "proteon nucleation center" stating that this language renders the claims indefinite. The Examiner refers to the statement on page 2, lines 19-20 of the specification wherein proteons are referred to as being "comprised of misfolded proteins" and states that this is not a sufficient definition.

In response, Applicant first refers the Examiner to the "Definitions" section of the application contained at the bottom of page 5 of the specification as filed. Proteons are defined as misfolded or partially misfolded proteins surrounding a proteon nucleation center (PNC). Thus, contrary to the Examiner's statement that Applicant has defined proteons as misfolded proteins, the definition contained in Applicant's specification is that proteons are misfolded proteins or partially misfolded proteins surrounding a protein nucleation center. This definition has now been inserted into step "c)" of claim 21.

With regard to proteon nucleation centers, this term was defined in the specification as filed at page 13, lines 13-14, and further at page 14, lines 20-27. A PNC is defined therein as a metallic nanoparticle having a diameter of about 1-2 nm and containing about 40-300 metal atoms of copper, zinc, iron or alloys of copper, zinc or iron. That definition has been added into claims 20 and 21. Further Applicant refers the Examiner to Example 6 starting at page 24 of the specification as filed, and particularly the last full paragraph on page 24 continuing on to the top of page 5 and then the first full paragraph on page 25. Thus, Applicant believes it has adequately defined both proteon nucleation centers as being metallic nanoparticles in the specification and has adequately defined proteons as being misfolded or partially misfolded proteins surrounding a PNC.

With regard to claim 30, Applicant has revised claim 30 to clarify the method described for detecting a disorder. Applicant believes claim 30 is now more accurate, and the Examiner should note that the term "proteons" has been eliminated from claim 30.

With regard to claims 27 and 28, the Examiner objected to the phrase "heating pressure" as lacking antecedent basis. Accordingly, Applicant has revised both claims 27 and 28 to clarify that pressure could be applied to each heated subsample of claim 21, although pressure is not required. Therefore, Applicant believes claims 27 and 28 are now definite.

In view of the above amendments, Applicant believes the Examiner should withdraw the rejection of claims 20-30 as being indefinite.

In the Office Action, claim 20 was rejected under 35 USC §102(b) as being anticipated by Potempa et al U.S. 5,874,238. The Examiner indicated that since Applicant had not distinguished between a "mutant protein" as set forth in the '238 reference and a PNC, the Examiner believed Potempa et al anticipated claim 20.

However, Applicant has revised claim 20 via the present Amendment to define a PNC and it is clear that a PNC is not a mutant protein. Potempa et al defines a mutant protein as one in which amino acids in the protein are added, deleted and/or replaced. Applicant is not in any way modifying amino acids of a protein to form such a mutant protein. A misfolded protein or partially misfolded protein has not been manipulated or modified by Applicant whereas proteins are modified in the Potempa et al '238 reference. Thus, Applicant believes Potempa et al does not anticipate or render obvious claim 20.

In the Office Action claims 21-22 and 24-27 were rejected under 35 USC §102(b) as being anticipated by Watanabe et al. The Examiner states that Watanabe et al teaches all the elements of claims 21-22 and 24-27.

However, Applicant respectfully disagrees. Claim 21 includes at least two steps not contained in Wantanabe et al. The first is step "c)" requiring the determination of the number of proteons in the heated subsample. This step is clearly not contained in Wantanabe et al. Secondly, step "d)" in claim 21 requires repeating the steps of the cyclic

amplification process defined "until the number of proteons determined to be in each heated subsample no longer increases." This step is not contained in Wantanabe et al. In contrast, Wantanabe et al discusses the inhibiting effects of dry heated egg white on the heat coagulation of fresh egg white. In addition, the effects of reheating time and temperature, as well as those of temperature and ionic strength, were also examined on coagulum formation and turbidity development. This appears to have very little to do with a method for the cyclic amplification of proteons as described in claim 21.

Accordingly, Applicant believes the Examiner should withdraw the §102(b) rejection of claims 21-22 and 24-27 based on Wantanabe et al.

An effort has been made to place this application in condition for allowance and such action is earnestly requested.

Respectfully submitted,

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